

nearly every page! It was beyond me why this was done, so I asked and was informed that it was an experiment by the press. Great! All I could think was why didn't the press let Rollins discuss the species in more detail and fill the pages up? Then the pages in my copy are cut so that the text is crooked on most pages—but I forgot to ask if this was part of the experiment too.

The strangest part of the experiment was to avoid putting the left margin flush with the column on the species descriptions and the representative specimens sections. This makes the pages look thoroughly unprofessional and sloppy. These portions of the text are distinct enough to most taxonomists, and if "eye-catchers" were needed, titles in bold-face type would have worked much better. For my part, the experiment should be written off as a total failure, and the press urged to return to the usual means of presenting taxonomic work.

And then there is the index. Or perhaps I should say, there is a section called "Index" but any resemblance with one is difficult to discover. Normally, one uses an index to find items not usually found in a table of contents—such as synonyms. Frankly, I could care less that the description of *Lesquerella alpina* is on pages 179–180, and the key to the subspecies is on page 180. What I really wanted to find was whatever happened to *L. subumbellata* Rollins? You hunt for it and you'll find it (eventually) on page 182 right under *L. alpina* var. *laevis* (Payson) C. L. Hitchc., which isn't indexed either. An index to the names would have been much more useful than the one presented.

In short, what Rollins and Shaw have done is excellent and enjoyable. What the press did with their years of hard work and research is a crime.—JAMES L. REVEAL, Department of Botany, University of Maryland, College Park 20742.

Alaska trees and shrubs. By LESLIE A. VIERICK and ELBERT L. LITTLE, JR. 265 pp., 128 figs., 128 maps, color vegetation map in pocket. U. S. D. A. Agricultural Handbook 410. 1972. \$3.25. Available from Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

This successor to *Pocket guide to Alaska trees* (Taylor and Little, 1950, USDA Handbook 5) is a much expanded and more useful work. As the title proclaims, all of the woody plants of Alaska are included, not just those species attaining the stature of trees, as in the earlier guide. The authors have divided the labor by life-forms, Little treating trees and Viereck shrubs. This has resulted in some anomalous treatments, such as Little's treatment of *Populus balsamifera* L. (Balsam Poplar) and *P. trichocarpa* Torr. and Gray (Black Cottonwood). Following extensive fieldwork in southern Alaska, Viereck reported in an earlier paper (Viereck and Foote, 1970, *Canad. Field-Naturalist* 84:169–173) that he agreed with the conclusion of Brayshaw (1965, *Canad. Field-Naturalist* 79:91–95) and Hultén (1968, *Ark. Bot.* 7:36–37), based upon the behavior of the two largely allopatric taxa in their region of sympatry in northwestern North America, that the two were conspecific, though to be recognized as subspecies. Little, who follows throughout the nomenclatural orthodoxies of his *Check list of native and naturalized trees of the United States (including Alaska)* (Little, 1953, USDA Handbook 41), takes no notice of these conclusions (despite the inclusion of two of the three cited papers in the bibliography), maintains the specific status of the two taxa, and merely remarks that the two intergrade or hybridize extensively wherever they come in contact. Aside from a very few such taxonomic quibbles, the species treatments seem quite sound. In addition to all of the data included in the "pocket guide", which are repeated here, the treatments of trees include much that is new, the remarks going far beyond the contents of the previous guide. The discussion of

Alaska vegetation and the included multicolored vegetation map are welcome additions, particularly for the layman (for whom, after all, the work is intended). The range maps, which are based upon Hultén (*Flora of Alaska and neighboring territories*, 1968), are quite clear, despite their small size. It is a pity, though, that only Alaska distribution is shown, despite the inclusion of portions of Siberia, British Columbia, and the Northwest Territories in the base map. Inclusion of the Canadian ranges, at least, would have made the volume more useful for northwest Canadian readers. The keys appear workable, those for trees being more informative than the originals in the "pocket guide". The keys to tree species in the text appear superfluous as they exactly duplicate couplets in the general key to trees, while the corresponding keys to species of shrubs are necessary and useful since the general key is just to genera. Each species treated is illustrated, the quality of representation being on the whole good. All of the illustrations of native trees (33) are reprinted from the "pocket guide" with the useful addition of winter twigs for deciduous species. The majority (22) of the tree illustrations ultimately derive from those first published in the classic *Forest trees of the Pacific slope* (Sudworth, 1908). While being very fond of that work, which is still unsurpassed for its thoroughgoing familiarity with West Coast trees, I am quite tired of seeing its illustrations repeatedly appear in books on western trees (sometimes inappropriately for Rocky Mountain forms). The present volume follows this tradition, with shrunken reproductions that have lost much of their clarity. It is time that someone should redraw the western trees to provide new insights into their characters. It would be especially pleasing to see a new figure of *Thuja plicata* Donn (Western Redcedar), for this oft-reproduced illustration is perhaps the worst, artistically and botanically, of all the figures in Sudworth's volume, and it has further decayed with reproduction. The illustrations of shrubs are as varied as their sources, and the constant change of drawing style as one turns from page to page is somewhat disturbing. Despite this juxtaposition of styles, most of the individual illustrations are at least adequate and often quite good. Whatever its drawbacks, this is a handy volume, well bound and modestly priced, that will be quite useful to any layman or botanist interested in the depauperate woody flora of the forty-ninth state.—JAMES E. ECKENWALDER, Department of Botany, University of California, Berkeley 94720.